



Peyman Naderi

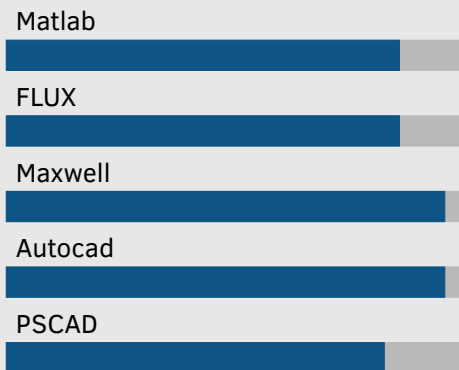
Associate Professor,
Electrical Engineering School,
Power Engineering Group,
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About me

Peyman Naderi was born in Ahvaz, Iran, in 1975. He received his B.S. degree in Electronic Engineering in 1998 and M.S. degree in Power Engineering from Chamran University, Iran, Ahvaz in 2001. He has Ph.D. in Power Engineering from K.N. Toosi University, Tehran, Iran. His interests are electrical machine modeling and fault diagnosis and also power system transient. He is currently an associate professor at Shahid Rajaei Teacher Training University, Tehran, Iran.

Skills



Last Update of This CV: January-2026

Interests

- Electrical machines modeling and fault diagnosis.
- Power system dynamic and control.
- Dynamic systems simulation and analysis.

Education

- 2004-2009 Ph.D. in Power Engineering Khaje Nasir University, Tehran, Iran
Thesis: Electrical Traction System using in Front Differential Vehicles.
- 1999-2002 M.Sc. in Power Engineering Shahid Chamran University, Ahvaz, Iran
Thesis: Electrical Load Forecasting by ANNs.

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- Click [here](#) to visit my ORCID Profile
- Click [here](#) to visit my Scopus Profile

Publications in JCR Journals since 2012

- 1)-2012 **P. Naderi***, **A. Farhadi**, 'NON-DRIVEN WHEELS APPLICATION FOR INTELLIGENT MULTI-OBJECTIVE CONTROL OF HYBRID VEHICLES', *International Journal of Robotics and Automation*, [CrossReff.](#)
- 2)-2013 **P. Naderi***, **M. Azizianfard**, 'A Fuel Cell/Battery Hybrid Vehicle Modeling and Power Management/Regenerative Braking Controller Design', *Jurnal of Fuel Cell Science and Technology*, [CrossReff.](#)
- 3)-2013 **P. Naderi***, 'Distributed Generation, Using Battery/Photovoltaic System: Modeling and Simulation With Relative Controller Design', *Journal of Solar Energy Engineering*, [CrossReff.](#)
- 4)-2015 **P. Naderi***, **A. Taheri**, 'Slot Numbering and Distributed Winding Effects Analysis on the Torque/Current Spectrum of Three-phase Wound-rotor Induction Machine Using Discrete Modeling Method', *Electric Power Components and Systems*, [CrossReff.](#)
- 5)-2015 **P. Naderi***, **A. Shiri**, 'Pole arc skewing analysis of synchronous reluctance machine using discrete method combined with winding function approach', *Applied Computational Electromagnetic Society Journal*, [CrossReff.](#)
- 6)-2015 **P. Naderi***, 'Eccentricity Fault Diagnosis and Torque Ripple Analysis of a Four-pole Synchronous Reluctance Machine in Healthy and Faulty Conditions', *Electric Power Components and Systems*, [CrossReff.](#)
- 7)-2016 **P. Naderi***, 'Inter-turn short-circuit fault detection in saturable squirrel-cage induction motor using magnetic equivalent circuit model', *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, [CrossReff.](#)
- 8)-2016 **P. Naderi***, 'Torque/current spectral analysis for healthy and eccentricity faulty synchronous reluctance machine using mathematical modeling method', *International Transactions on Electrical Energy Systems*, [CrossReff.](#)
- 9)-2016 **P. Naderi***, **F. Fallahi**, 'Eccentricity fault diagnosis in three-phase-wound-rotor induction machine using numerical discrete modeling method', *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, [CrossReff.](#)

Publications in JCR Journals since 2012 (Continued)

- 10)-2016 [P. Naderi*](#), 'Cage-rotor induction motor inter-turn short circuit fault detection with and without saturation effect by MEC model', *ISA Transaction*, [↗ CrossReff.](#)
- 11)-2017 [J. Mahmoodi](#), [S.Z. Moosavi*](#), [P. Naderi](#), 'Partial discharge diagnosis of ceramic pin insulators considering cost-worth analysis: Case study in a medium voltage feeder', *IEEE Transactions on Dielectrics and Electrical Insulation*, [↗ CrossReff.](#)
- 12)-2017 [P. Naderi*](#), [A. Shiri](#), 'Rotor/Stator Inter-Turn Short Circuit Fault Detection for Saturable Wound-Rotor Induction Machine by Modified Magnetic Equivalent Circuit Approach', *IEEE Transactions on Magnetics*, [↗ CrossReff.](#)
- 13)-2017 [P. Naderi*](#), 'Modified magnetic-equivalent-circuit approach for various faults studying in saturable double-cage-induction machines', *IET Electric Power Applications*, [↗ CrossReff.](#)
- 14)-2017 [P. Naderi*](#), [R. Ghandehari](#), 'Modeling and stator Inter-Turn short circuit fault detection for saturable salient pole synchronous machine by a non-linear magnetic equivalent circuit approach', *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, [↗ CrossReff.](#)
- 15)-2018 [B. Ehsanmaleki](#), [P. Naderi*](#), [H. Beyranvand](#), 'A novel 2-stage WAPSS design method to improve inter-area mode damping in power systems', *International Transactions on Electrical Energy Systems*, [↗ CrossReff.](#)
- 16)-2018 [P. Naderi*](#), 'Magnetic-equivalent-circuit approach for inter-turn and demagnetisation faults analysis in surface mounted permanent-magnet synchronous machines using pole specific search-coil technique', *IET-Electric Power Applications*, [↗ CrossReff.](#)
- 17)-2018 [P. Naderi*](#), [A. Shiri](#), 'Modeling of Ladder-Secondary-Linear Induction Machine Using Magnetic Equivalent Circuit', *IEEE Transaction on Vehicular Technology*, [↗ CrossReff.](#)
- 18)-2019 [P. Naderi*](#), [S. Sharouni](#), [M. Moradzadeh](#), 'Analysis of Partitioned Stator Flux-Switching Permanent Magnet Machine by Magnetic Equivalent Circuit', *International Journal of Electrical Power & Energy Systems*, [↗ CrossReff.](#)
- 19)-2019 [P. Naderi*](#), [M. Rostami](#), [A. Ramezannazhad](#), 'Phase-to-phase fault detection method for synchronous reluctance machine using MEC method', *Electrical Engineering (Springer)*, [↗ CrossReff.](#)
- 20)-2019 [P. Naderi*](#), [S. Sharouni](#), [P. Hajhosseini](#), 'Rotor/Stator Internal Phase to Phase Fault Detection in Three-Phase Wound Rotor Induction Machines', *Electric Power Component and Systems*, [↗ CrossReff.](#)
- 21)-2020 [S. Sharouni](#), [P. Naderi*](#), [M. Hedayati](#), [P. Hajhosseini](#), 'Demagnetization fault detection by a novel and flexible modeling method for outer rotor permanent magnet synchronous machine', *International Journal of Electrical Power & Energy Systems*, [↗ CrossReff.](#)
- 22)-2020 [S.R Eftekhari](#), [S.R. Davari*](#), [P. Naderi](#), [C. Garcia](#), [C. Rodriguez](#), 'Robust Loss Minimization for Predictive Direct Torque and Flux Control of an Induction Motor with Electrical Circuit Model', *IEEE Transaction on Power Electronics*, [↗ CrossReff.](#)
- 23)-2020 [P. Naderi*](#), [S. Sharouni](#), [M. Moradzadeh](#), 'Linear vernier machine wave converter modelling and analysis by MEC', *IET Electric Power Applications*, [↗ CrossReff.](#)
- 24)-2020 [P. Naderi*](#), [M. Heidary](#), [M. Vahedi](#), 'Performance analysis of ladder-secondary-linear induction motor with two different secondary types using Magnetic Equivalent Circuit', *ISA Transaction*, [↗ CrossReff.](#)
- 25)-2020 [P. Naderi*](#), [S. Sharouni](#), [M. Heidary](#), 'A Novel Analysis on a New DC-Excited Flux-Switching Machine using Modified MEC Method for Ground Power Unit Application', *IEEE Trans. on Energy Conversion*, [↗ CrossReff.](#)
- 26)-2021 [S. Sharouni](#), [P. Naderi*](#), [M. Hedayati](#), [P. Hajhosseini](#), 'Performance analysis of a novel outer rotor flux-switching permanent magnet machine as motor/generator for vehicular and aircraft applications', *IET Electric Power Applications*, [↗ CrossReff.](#)

Publications in JCR Journals since 2012 (Continued)

- 27)-2021 [P. Naderi*](#), [M. Heidary](#), 'A Novel Permanent Magnet Flux-Switching Linear Motor Performance Analysis by Flexible MEC Method', *IEEE Transaction on Energy Conversion*, [CrossReff.](#)
- 28)-2021 [B. Nikmaram](#), [A. Davarri*](#), [P. Naderi](#), [C. Garcia](#), [J. Rodriguez](#), 'Sensorless Simplified Finite Control Set Model Predictive Control of SynRM Using Finite Position Set Algorithm', *IEEE Access*, [CrossReff.](#)
- 29)-2021 [R. Ghandehari](#), [P. Naderi*](#), [L. Vandevelde](#), 'Performance Analysis of a New Type PM-Resolver in Healthy and Eccentric Cases by an Improved Parametric MEC Method', *IEEE Transactions on Instrumentation and Measurement*, [CrossReff.](#)
- 30)-2021 [P. Naderi*](#), [R. Ghandehari](#), [M. Heidary](#), 'A Comprehensive Analysis on the Healthy and Faulty Two Types VR-Resolvers with Eccentricity and Inter Turn-Faults', *IEEE Transactions on Energy Conversion*, [CrossReff.](#)
- 31)-2021 [M. Heidary](#), [P. Naderi*](#), [A. Shiri](#), 'Modeling and Analysis of a Multi-Segmented Linear Permanent-Magnet Synchronous Machine using a Parametric Magnetic Equivalent Circuit', *Electrical Engineering*, [CrossReff.](#)
- 32)-2021 [M. Rostami](#), [P. Naderi*](#), [A. Shiri](#), 'Modeling and analysis of variable reluctance resolver using magnetic equivalent circuit.', *COMPEL - The international journal for computation and mathematics in electrical and electronic engineering*, [CrossReff.](#)
- 33)-2021 [P. Naderi*](#), [A. Ramezannezhad](#), [L. Vandevelde](#), 'Performance Analysis of Variable Reluctance Linear Resolver by Parametric Magnetic Equivalent Circuit in Healthy and Faulty Cases', *IEEE Sensors Journal*, [CrossReff.](#)
- 34)-2022 [M. Rostami](#), [P. Naderi*](#), [A. Shiri](#), 'Intern-turn fault modeling and diagnosis in permanent magnet vernier machine using modified magnetic equivalent circuit method', *COMPEL - The international journal for computation and mathematics in electrical and electronic engineering*, [CrossReff.](#)
- 35)-2022 [M. Rostami](#), [P. Naderi*](#), [A. Shiri](#), 'Modelling and analysis of permanent magnet vernier machine using flexible magnetic equivalent circuit method', *IET Science, Measurements and Technology*, [CrossReff.](#)
- 36)-2022 [P. Naderi*](#), [R. Ghandehari](#), 'Comprehensive Analysis on a New Type VR-Resolver With Toroidal Windings Under Healthy and Eccentric Cases', *IEEE Transaction on Industrial Electronics*, [CrossReff.](#)
- 37)-2022 [M. Rostami](#), [P. Naderi*](#), [A. Shiri](#), 'Modeling and detection of demagnetization fault in permanent magnet vernier machine using flexible magnetic equivalent circuit method', *Scientia Iranica*, [CrossReff.](#)
- 38)-2022 [P. Naderi*](#), [A. Ramezannezhad](#), [L. Vandevelde](#), 'A Novel Linear Resolver Proposal and Its Performance Analysis Under Healthy and Asymmetry Air-Gap Fault', *IEEE Transactions on Instrumentation and Measurement*, [CrossReff.](#)
- 39)-2022 [M. Heidary](#), [V. Nekookar](#), [P. Naderi*](#), [A. Shiri](#), 'Convolutional Neural Network for Ladder-Secondary Linear Induction Motor Fault Diagnosis', *Scientia Iranica*, [CrossReff.](#)
- 40)-2022 [A. Ramezannezhad](#), [P. Naderi*](#), [L. Vandevelde](#), 'A Novel Method for Accuracy Improvement of Variable Reluctance Linear Resolvers', *IEEE Sensors Journal*, [CrossReff.](#)
- 41)-2023 [P. Naderi*](#), [A. Fathi](#), 'Fault Diagnosis/Separation of Surface Mounted Permanent Magnet Synchronous Machine by Current and its Homopolar Orders Analysis', *IEEE Transactions on Energy Conversion*, [CrossReff.](#)
- 42)-2023 [P. Naderi*](#), 'A Novel Variable-Reluctance Resolver Proposal and its Performance Analysis under Healthy and Eccentric Cases', *Mechatronics (Elsevier)*, [CrossReff.](#)
- 43)-2023 [P. Naderi*](#), [S. Mikaeeli](#), [A. Ramezannezhad](#), 'A New Type of Linear Resolver Proposal and Its Accuracy Analysis Under Normal State and Air-Gap Asymmetry Fault', *IEEE Transactions on Industrial Electronics*, [CrossReff.](#)

Publications in JCR Journals since 2012 (Continued)

- 44)-2023 [P. Naderi*](#), [S. Sharouni](#), [B. Ehsan-Maleki](#), 'A Novel Robust Linear Resolver Proposal and Performance Analysis Under Healthy and Air-Gap Asymmetry Fault', *IEEE Transactions on Instrumentation and Measurement.*, [↗ CrossReff.](#)
- 45)-2024 [P. Naderi*](#), [B. Ehsan-Maleki](#), [A. Ramezannezhad](#), 'A Robust High-Accuracy Wound Rotor Resolver Proposal with One and Two Pole Pairs', *IEEE Sensors Journal.*, [↗ CrossReff.](#)
- 46)-2024 [P. Naderi*](#), [M. H. Rezaee](#), [A. Ramezannezhad](#), 'A Novel Robust Double-Side Linear Resolver Proposal with Toroidal Windings', *IEEE Transactions on Instrumentation and Measurement*, [↗ CrossReff.](#)
- 47)-2025 [P. Naderi*](#), [A. Ramezannezhad](#), 'Proposal of a Novel High-Accuracy and Robust Tubular Resolver with Simplified Structure', *IEEE Transactions on Industrial Electronics*, [↗ CrossReff.](#)
- 48)-2025 [P. Naderi*](#), [A. Ramezannezhad](#), 'A Novel Robust 20-Pole Resolver Proposal and its Accuracy Analysis Under Eccentric Rotor', *IEEE Transactions on Instrumentation and Measurement*, [↗ CrossReff.](#)
- 49)-2026 [P. Naderi*](#), [A. Ramezannezhad](#), 'A Robust, Simple Structure Double-Sided Linear Resolver Proposal', *IEEE Transactions on Instrumentation and Measurement*, [↗ CrossReff.](#)

Publications in Scopus Journals since 2012

- 1)-2012 [A. Samimi, P. Naderi, 'A new method for optimal placement of TCSC based on sensitivity analysis for congestion management', *Smart Grid and Renewable Energy*, ↗ \[CrossReff.\]\(#\)](#)
- 2)-2013 [P. Naderi, R. Ghandehari, 'Full Modelling and Simulation of Fuel-Cell/Battery Hybrid Vehicle and Power Management Controller Design', *International Journal of Modelling and Simulation*, ↗ \[CrossReff.\]\(#\)](#)
- 3)-2013 [P. Naderi, S. Sharouni, 'Intelligent braking system for stability enhancement of vehicle braking, using fuzzy logic controllers', *International Journal of Vehicle Safety*, ↗ \[CrossReff.\]\(#\)](#)
- 4)-2014 [P. Naderi, M.R. Alizadeh, 'A novel controlling method for the superconducting magnetic energy storage system as a distributed generation source; full modelling, design and simulation', *International Journal of Sustainable Energy*, ↗ \[CrossReff.\]\(#\)](#)
- 5)-2014 [P. Naderi, Z. Salarvand, 'Driving/regeneration and stability enhancement of 4WD hybrid vehicles, using multi-stage fuzzy controller', *International Journal of Vehicle Safety*, ↗ \[CrossReff.\]\(#\)](#)
- 6)-2015 [P. Naderi*, F. Fallahi, 'A novel structure proposal for distributed generation using SMES and PV system with relative controllers design', *Energy Systems*, ↗ \[CrossReff.\]\(#\)](#)
- 7)-2016 [M. Magroori, A. Farhadi, P. Naderi, 'Hydraulic anti-lock and anti-skid braking system using fuzzy controller', *Journal of Computational and Applied Research in Mechanical Engineering*, ↗ \[CrossReff.\]\(#\)](#)
- 8)-2020 [F. Fallahi, P. Naderi, 'Analyzing the internal resonances and energy exchange between modes of power system considering Frequency-Energy dependence using Pseudo-Arclength and shooting algorithm', *AUT Journal of Electrical Engineering*, ↗ \[CrossReff.\]\(#\)](#)

Publications in International Conferences since 2012

- 1)-2015 [P. Naderi, 'Eccentricity fault diagnosis studying fora round rotor synchronous machine modified winding function approach combined to discrete method moding method', *30th Power System Conference, PSC 2015, Iran*](#)
- 2)-2016 [A. Dolatshah, P. Naderi, 'Eccentricity fault detection of a salient-pole synchronous machine using modified winding function approaches and finite element method', *7th Power Electronics, Drive Systems and Technologies Conference, PEDSTC 2016, Iran*](#)
- 3)-2017 [P. Naderi, 'Saturable Cage-Rotor induction machine modeling by nonlinear magnetic equivalent circuit method', *IECON Proceedings \(Industrial Electronics Conference \(2016\)\)*, Italy](#)
- 4)-2017 [P. Naderi, 'Double-Cage Induction Machines Modeling by Modified Magnetic Equivalent Circuit', *Diagnostics for Electrical Machines, Power Electronics and Drives \(SDEMPED-2017\)*, Greece](#)
- 5)-2018 [P. Naderi, M.R. Raiat-Roknabdi, 'Inter-Turn Short Circuit Fault Studying in Switch Reluctance Machines Using Magnetic Equivalent Circuit', *10th Power Electronics, Drive Systems, and Technologies Conference \(2019\)*, IRAN](#)
- 6)-2019 [S.R Eftekhari, S.R. Davari, P. Naderi, C. Garcia, C. Rodriguez, 'A Simple and Robust Model-Based Loss Minimization Method for Direct Torque Control of Induction Motor ', *ICPE 2019 - 10th International Conference on Power Electronics - ECCE Asia, Malaysia*](#)
- 7)-2020 [M. Rostami, P. Naderi, A. Shiri, 'Analysis of Linear Primary Permanent Magnet Vernier Machine Using Finite element method', *11th Power Electronics, Drive Systems, and Technologies Conference \(2020\)*, IRAN](#)
- 8)-2020 [B. Nikmaram, A. Davarri, P. Naderi, C. Garcia, J. Rodriguez, 'Simplified Modulated Model Predictive Control of Synchronous Reluctance Motor', *11th Power Electronics, Drive Systems, and Technologies Conference \(2020\)*, IRAN](#)

Industrial Projects

- 1)-2012 *P. Naderi*, '**Capacitor Optimal Placement in Distributed Network of AZNA city (Lorestan)**', Lorestan Distribution Company,
Price: 200000000 R
- 2)-2017 *P. Naderi*, '**Optimal Placement of DGs in Guilan Power Network**', Guilan Regional Electric Company,
Price: 720000000 R

International Honors

- 1) In world's Top 2% Scientists in 2021 [↗ CrossReff.](#)
- 2) In world's Top 2% Scientists in 2022 [↗ CrossReff.](#)
- 3) In world's Top 2% Scientists in 2023 [↗ CrossReff.](#)
- 4) In world's Top 2% Scientists in 2024 [↗ CrossReff.](#)
- 5) Star reviewer in IEEE Trans. on Energy conversion in 2021 [↗ CrossReff.](#)
- 6) Star reviewer in IEEE Trans. on Energy conversion in 2022 [↗ CrossReff.](#)
- 7) Star reviewer in IEEE Trans. on Energy conversion in 2023 [↗ CrossReff.](#)
- 8) Star reviewer in IEEE Trans. on Energy conversion in 2024 [↗ CrossReff.](#)

My Interests:

- 1) Linear and Rotational Electrical Machines Modeling, Simulation, and Fault Detection
- 2) Power System Dynamic and Control
- 3) Electromagnetic Sensors and Resolvers